REMARKS/ARGUMENTS

Overview of the Office Action

Claims 1-3 and 6-8 have been rejected by the Examiner under 35 U.S.C. § 102(b) as being anticipated by Taylor (U.S. Patent No. 5,209,560).

Claims 4, 5, and 9 have been objected to by the Examiner as being dependent upon a rejected base claim but would otherwise be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

Status of the Claims/Amendments

Claims 1-9 are pending.

Claims Rejected Under 35 U.S.C. § 102(b)

Claims 1-3 and 6-8 have been rejected by the Examiner under 35 U.S.C. § 103(a) as being anticipated by Taylor (U.S. Patent No. 5,209,560). However, in order to anticipate a claimed invention, a prior art reference must teach each and every element present in the claim, and Applicants respectfully submit that Taylor fails to teach each and every element present in the rejected claims.

The invention of Taylor is directed to "[a] stage lighting system has a plurality of automated lamp units which can vary the parameters of a light beam for pan, tilt, brightness, intensity and size," said stage lighting system comprising, among other things, an "intelligent data link system [that] includes a plurality of signal repeaters, each of which includes a microprocessor and an associated memory for controlling the communication of data and for cooperating in error detection and correction" (Taylor, Abstract, lines 1-3 and 12-16). However,

Applicants respectfully submit that, contrary to the Examiner's assertion, nowhere does Taylor teach a controller that "is programmed to delay, route and regenerate data at mixed baud rates, mixed character framing bits and **mixed protocols**" (Claim 1, lines 4-5) (emphasis added) or "re-transmitting the error corrected data at mixed baud rates, mixed character framing bits and **mixed protocols**" (Claim 7, lines 3-4) (emphasis added).

As stated in the Specification of the present Application, "One particularly beneficial function of the serial communications hub 100 is its ability to delay, route and regenerate data on the fly at mixed baud rates, mixed character framing bits, and mixed protocols. This is accomplished **without any setup prior to operation**, such as selecting baud, number of stop bits, number of data bits, etc. To accomplish this [retransmission of received data], all incoming data is digitized and quantitized in the time domain. ... Upon re-transmission, the time values are used to reconstruct the data... Advantages of this approach include the ability to store, recall, route, and error correct data **without any knowledge of the data formatting or protocol**" (Specification, page 3, lines 18-25) (emphasis added). In other words, the baud rates, framing bits, and protocols of the received data transmission, as such terms are defined in the Specification, are *irrelevant* to the serial communications hub (SCH) in the present application because the SCH is unconcerned with the *content* of the data message (including its protocols, encoding, etc.) but, instead, receives the analog data transmission, converts and temporarily holds (stores) the data transmission digitally, and then reconstructs and retransmits the data transmission as an analog signal once again. Interestingly enough by deconstructing, storing, and later reconstructing the analog data transmission in this way, the SCH is also inherently reconstructs the digital baud rates, character framing bits, and underlying protocols that are part

of that data transmission *despite not having any actual knowledge or understanding of these elements*.

In contrast, the invention of Taylor is *entirely* concerned with the contents of the data transmission and, thus, requiring an understanding of the data formatting and transmission protocols associated with said data transmission in order to process it. For example, in regard to what the Examiner has identified as Taylor's reference to "mixed character framing bits and mixed protocols" (Office Action, page 2, lines 21-23, referring to Taylor, col. 7, lines 50-54)—and in addition to the fact that the definitional use of these terms in the present Application is significantly different than that being adopted by the Examiner in interpreting Taylor—it is important to note that this cited section—which clearly states that "handshake control signals are passed between the DMA controller 240 and the multiprotocol controller 246 to synchronize the high speed communication of data to and from the microprocessor 200" (Taylor, col. 7, lines 50-54)—specifically refers to the necessity for handshake control signals to establish a set of common communication parameters which, as known and appreciated by those of skill in the art, include without limitation a common protocol, baud rate, framing bit set, and so forth as a necessary precursor for the recipient to understand and process the data of the communication.

In other words, although the invention of Taylor may be able to utilize multiple protocols and various character framing bits, to receive a message it requires knowledge of what the specific protocol and framing bits are in fact being used by the source of the data transmission. This conclusion is further supported by the following section from Taylor:

> "The console can send network control messages which are received by all repeater units practically simultaneously. A network control message may be

> addressed to a specific repeater unit or the message may be addressed to all repeater units using a common repeater address. **Each repeater unit individually responds to the message depending on the address or the content of the message.** For example, a message instructing the repeaters to begin status polling of the lamp units would be sent to a common repeater address. A message instructing a specific repeater to transmit a block of lamp unit status data to the console (or to the next repeater unit along the reply network) would be sent to a specific repeater address. The repeater also sends network state messages as required, which messages include for example: data representing the kinds of errors detected, which branches of the network exhibit errors, and which branches have been disabled.

(Taylor, col. 36, line 53 to col. 37, line 2) (emphasis added). Likewise, Taylor also states that the "DMA controller 480 and communications controller 454 receive the signals into RAM 482 **where the decoded message can be examined or interpreted by processor** 450" (Taylor, col. 37, lines 7-10). Therefore, at most, Taylor may be able to retransmit digital content so long as it understands the protocol associated with the data transmission, but the invention of Taylor simply cannot process the receipt and retransmission of a data transmission for which it does not know the protocol, framing bits, or other necessary information to convert the analog transmission signal into digitial information for processing.

In contrast, the invention of the present Application is directed to receiving and retransmitting an analog signal, without understanding the content, protocols, or other information embedded in said analog signal, using a method by which the analog signal is

converted in a temporary digital state, stored, and retransmitted at a later time. This is accomplished by digitizing an incoming analog transmission based on a quantitized time domain (and *not* on any kind of transmission protocol), storing said digital information, and then using the time-domain digitization values to reconstruct the data for retransmission—all without **any knowledge of the data formatting or protocol**.

In conclusion, Applicants respectfully conclude that Taylor does not teach the receiving and retransmitting of data regardless of the protocol necessary for understanding that data, and thus Taylor fails to teach all the claim elements in independent Claims 1 and 7 of the present Application, upon which Claims 2, 3, 6, and 8 depend. Applicants therefore request that the rejection of Claims 1-3 and 6-8 under 35 U.S.C. § 102(b) be withdrawn.

Allowable Subject Matter

Claims 4, 5, and 9 have been objected to by the Examiner as being dependent upon a rejected base claim but would otherwise be allowable if rewritten in independent form to include all of the limitations of the base claim and any intervening claims.

In light of the arguments presented hereinabove regarding independent base Claims 1 and 7, from which Claims 4, 5, and 9 depend, Applicants respectfully submit that the rejection of Claims 1 and 7 have been traversed and said claims are allowable. In light of the fact that claims that depend upon allowable claims are themselves allowable, Applicants respectfully request that Claims 4, 5, and 9 be allowed to issue in their present form as claims dependent upon allowable claims.

CONCLUSION

Based on the reasons and rationale set forth herein, Applicants respectfully submit that the objections and rejections have been overcome and, accordingly, Applicants request that the objections and rejections be withdrawn and that the claims be allowed to issue. Should the Examiner have any questions, comments, or suggestions that would expedite the prosecution of the present case to allowance, Applicants' undersigned representative earnestly requests a telephone conference at (206) 332-1394.

Respectfully submitted,

Date: March 31, 2004

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